

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>104379 PJ/HA</b>	<div style="display: flex; justify-content: space-between;"> <div> <b>FOR FURTHER ACTION</b> </div> <div> <small>see Form PCT/ISA/220 as well as, where applicable, item 5 below.</small> </div> </div>	
International application No. <b>PCT/FI 2004/000211</b>	International filing date ( <i>day/month/year</i> ) <b>7 April 2004</b>	(Earliest) Priority Date ( <i>day/month/year</i> ) <b>10 April 2003</b>
Applicant <b>PULKKA, Esko</b>		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☐ Certain claims were found unsearchable (see Box No. II)

3. ☐ Unity of invention is lacking (see Box No. III)

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. 5

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

# 1

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/FI 2004/000211

### A. CLASSIFICATION OF SUBJECT MATTER

IPC7: B64C 1/38, F15D 1/02, F15D 1/12  
According to International Patent Classification (IPC) or to both national classification and IPC

### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: B64C, F15D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ

### C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0354022 A2 (MINNESOTA MINING AND MANUFACTURING COMPANY), 7 February 1990 (07.02.1990), column 1, line 43; column 4, line 49 - line 56 --	1-11
X	US 3578264 A (THE BATTELLE DEVELOPMENT CORPORATION), 11 May 1971 (11.05.1971), column 1, line 66 - line 71, figures 10,14, abstract --	1-11
X	US 3776363 A (KUETHE), 4 December 1973 (04.12.1973), abstract --	1-11
X	US 4284302 A (DREWS), 18 August 1981 (18.08.1981), column 2, line 11 - line 15, figure 1 --	1-11

☒ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

\* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search  
8 July 2004

Date of mailing of the international search report  
13-07-2004

Name and mailing address of the ISA/  
Swedish Patent Office  
Box 5055, S-102 42 STOCKHOLM  
Facsimile No. +46 8 666 02 86

Authorized officer  
Lena Nilsson/ JA A  
Telephone No. +46 8 782 25 00

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 2004/000211

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4564959 A (ZAHN), 21 January 1986 (21.01.1986), column 1, line 48 - line 51, abstract  --	1-11
X	US 5200573 A (BLOOD), 6 April 1993 (06.04.1993), figures 1-12, abstract  --	1-11
X	US 5289997 A (HARRIS), 1 March 1994 (01.03.1994), abstract  --	1-11
X	US 5836840 A (BUSTAMANTE ET AL), 17 November 1998 (17.11.1998), figure 6, abstract  --	1-11
X	US 6131853 A (BAUER ET AL), 17 October 2000 (17.10.2000), column 7, line 12 - line 17; column 7, line 61 - line 67  --	1-11
X	US 6276636 B1 (KRASTEL), 21 August 2001 (21.08.2001), column 2, line 26 - line 64; column 4, line 1 - line 26  -- -----	1-11

## INTERNATIONAL SEARCH REPORT

Information on patent family members

30/04/2004

International application No.

PCT/FI 2004/000211

EP	0354022	A2	07/02/1990	AU	3923289	A	08/02/1990
				BR	8903908	A	27/03/1990
				JP	2081796	A	22/03/1990
				PT	91369	A	08/03/1990
-----							
US	3578264	A	11/05/1971	DE	1934246	A	22/01/1970
				FR	2012571	A	20/03/1970
				GB	1281899	A	19/07/1972
				US	3741285	A	26/06/1973
-----							
US	3776363	A	04/12/1973	NONE			
-----							
US	4284302	A	18/08/1981	NONE			
-----							
US	4564959	A	21/01/1986	AU	560906	B	16/04/1987
				AU	2894084	A	06/12/1984
				CA	1222852	A	16/06/1987
				DE	3320301	C	08/11/1984
				DE	8316411	U	05/04/1984
				DK	242784	A	05/12/1984
				EP	0127811	A	12/12/1984
				ES	288707	U,Y	16/01/1986
				JP	60009906	A	19/01/1985
				NO	842208	A	05/12/1984
-----							
US	5200573	A	06/04/1993	US	5378524	A	03/01/1995
-----							
US	5289997	A	01/03/1994	AU	1912292	A	17/11/1992
				US	5108145	A	28/04/1992
				WO	9218371	A	29/10/1992
-----							
US	5836840	A	17/11/1998	NONE			
-----							
US	6131853	A	17/10/2000	NONE			
-----							
US	6276636	B1	21/08/2001	NONE			
-----							